

RECEIVED

04-26-01

1645

#5/11/01



APR 30 2001

TECH CENTER 1600/2900

Express Mail No.: EL 501 638 610 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: James W. Jackson

Application No.: 09/677,752

Group Art Unit: 1645 ✓

Filed: October 3, 2000

Examiner: V. Ford

For: CHLAMYDIA PROTEIN, GENE  
SEQUENCE AND USES THEREOF

Attorney Docket No.: 7969-087-999

**RESPONSE UNDER 37 C.F.R. § 1.111**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the outstanding Office Action dated March 30, 2001, please consider the remarks below.

**REMARKS**

Restriction to one of the following has been required under 35 U.S.C. §121:

- I. Claims 1-7, 15-24, 31-32, 41 and 57-59 are drawn to an isolated PMPE polypeptide of *Chlamydia spp*;
- II. Claims 1-7, 15-24, 31-32, 41 and 57-59 are drawn to an isolated PMPI polypeptide of *Chlamydia spp*;
- III. Claims 11-14, and 30 are drawn to an antibody or antigen-binding fragment thereof that specifically binds PMPE and vaccine;
- IV. Claims 11-14, and 30 are drawn to an antibody or antigen-binding fragment thereof that specifically binds PMPI and vaccine;
- V. Claims 8-10, 25-29 and 31-32 are drawn to an isolated fusion polypeptide comprising at least two peptides and at least two peptides each consisting of an amino acid sequence different from PMPE and PMPI and vaccine;
- VI. Claims 33-41 and 50-56 are drawn to a nucleic acid molecule comprising a nucleotide sequence encoding a PMPE polypeptide;

- VII. Claims 33-41, 49 and 50-56 are drawn to a nucleic acid molecule comprising a nucleotide sequence encoding a PMPI polypeptide;
- VIII. Claims 41-44 and 46-47 are drawn to a method of producing an immune response in an animal comprising administering to the animal an immunogenic amount of PMPE polypeptide;
- IX. Claims 42-44 and 46-47 are drawn to a method of producing an immune response in an animal comprising administering to the animal an immunogenic amount of PMPI polypeptide;
- X. Claims 44 and 47 are drawn to a method of producing an immune response in an animal comprising administering to the animal an immunogenic amount of an isolated fusion protein;
- XI. Claims 45 and 47 are drawn to a method of producing an immune response in an animal comprising administering to the animal an immunogenic amount of nucleic acid encoding PMPE;
- XII. Claims 45 and 47 are drawn to a method of producing an immune response in an animal comprising administering to the animal an immunogenic amount of nucleic acid molecule encoding PMPI;
- XIII. Claim 47 is drawn to a method of producing an immune response in an animal comprising administering to the animal an immunogenic amount of an antibody to PMPE;
- XIV. Claim 47 is drawn to a method of producing an immune response in an animal comprising administering to the animal an immunogenic amount of antibody to PMPI;
- XV. Claims 60-62, 65, and 67-68 are drawn to a method of preventing, treating or ameliorating a disorder or disease associated with infection of an animal with *Chlamydia* by administering to the subject an effective amount of PMPE polypeptide;
- XVI. Claims 60-62, 65, and 67-68 are drawn to a method of preventing, treating or ameliorating a disorder or disease associated with infection of an animal with *Chlamydia* by administering to the subject an effective amount of PMPI polypeptide;
- XVII. Claims 63 and 68 are drawn to a method of preventing, treating or ameliorating a disorder or disease associated with infection of an animal with *Chlamydia* by administering to the subject an effective amount of antibody to PMPE polypeptide;
- XVIII. Claims 63 and 68 are drawn to a method of preventing, treating or ameliorating a disorder or disease associated with infection of an

animal with *Chlamydia* by administering to the subject an effective amount of antibody to PMPI polypeptide;

- XIX. Claims 64 and 68 are drawn to a method of preventing, treating or ameliorating a disorder or disease associated with infection of an animal with *Chlamydia* by administering to the subject an effective amount of an isolated fusion protein;
- XX. Claims 66-68 are drawn to a method of preventing, treating or ameliorating a disorder or disease associated with infection of an animal with *Chlamydia* by administering to the subject an effective amount of nucleic acid molecule encoding PMPI polypeptide;
- XXI. Claims 66-68 are drawn to a method of preventing, treating or ameliorating a disorder or disease associated with infection of an animal with *Chlamydia* by administering to the subject an effective amount of nucleic acid molecule encoding PMPI polypeptide;
- XXII. Claim 69 is drawn to an antagonist which inhibits the activity of the PMPE polypeptide;
- XXIII. Claim 69 is drawn to an antagonist which inhibits the activity of the PMPI polypeptide;
- XIX. Claim 70 is drawn to an antagonist which inhibits expression in nucleic acid which encodes PMPE;
- XXV. Claim 70 is drawn to an antagonist which inhibits expression in nucleic acid molecule which encodes PMPI;
- XXVI. Claim 71 is drawn to method of identifying compounds that interact with the PMPE polypeptide;
- XXVII. Claim 71 is drawn to method of identifying compounds that interact with the PMPI polypeptide;
- XXVIII. Claim 72 is drawn to method of identifying compounds that interact with the nucleic acid molecule that encodes PMPE polypeptide;
- XXIX. Claim 72 is drawn to method of identifying compounds that interact with the nucleic acid molecule that encodes PMPI polypeptide;

In response Applicant elects to prosecute the subject matter of Group I, claims 1-7, 15-24, 31-32, 41 and 57-59 directed to an isolated PMPE polypeptide of *Chlamydia spp.*

Applicant fully reserves all rights to prosecute the non-elected subject matter in one or more divisional applications.

Respectfully submitted,

Date April 25, 2001

Geraldine F. Baldwin 31,232  
Geraldine F. Baldwin (Reg. No.)

**PENNIE & EDMONDS LLP**  
1155 Avenue of the Americas  
New York, New York 10036-2711  
(212) 790-9090

by Margaret B. Pridemore  
Reg No. 40,922